PEO EIS INDUSTRY DAY

Transforming the Army's LandWarNet to an Enterprise Activity

2010-03-30T12:30:00Z

LTG Jeff Sorenson

Chief Information Officer/G-6, HQDA

AMERICA'S ARMY: THE STRENGTH OF THE NATION
ARMY STRONG

Agenda

- **Warfighter Needs**
- **Transforming Using GNEC Strategy**
- **Army Enterprise Architecture**
  - Architecture Components
  - Current Issues
- **Future Enterprise Network**
  - CSA "Unity of Effort" Tasking
  - GNEC "Big 4"
- **Current Issues**
  - ARFORCYBER
  - FY10 Budget
- **Conclusions**

Warfighter Needs

- Data Access & Discovery

- Global Access to the Network

- Single Network Infrastructure

- Common Network Policy & Standards

- Web 2.0 Tools

America's Army – The Strength of the Nation

CSA Memorandum: LandWarNet – Global Network Enterprise Construct Strategy Implementation, 2 March 2009

UNITED STATES ARMY
THE CHIEF OF STAFF
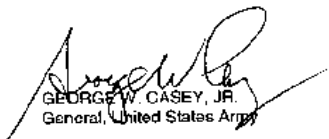
MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: LandWarNet – Global Network Enterprise Construct

1. We are transforming to become a fundamentally different Army, an expeditionary force capable of full-spectrum operations. To support this, we must fundamentally change and adapt our institutions, including LandWarNet, the Army's portion of the Global Information Grid. Over the next three years, the Army will transform LandWarNet to a centralized, more secure, operationalized, and sustainable network capable of supporting an expeditionary Army in this era of persistent conflict. To lay the foundation for further network expansion in the future, we will synchronize this transformation with other Army activities including the Army Force Generation model, Base Realignment and Closure, and Global Defense Posture Realignment. In FY09, we will set the foundation for the global network by achieving an initial operating capability of a network service center (NSC) in Europe; expanding these NSCs throughout all other Theaters by FY11.

2. We will use the Global Network Enterprise Construct (GNEC) as the network enterprise strategy. The CIO/G6 will establish new procedures to operationalize the network and improve the overall security of network services and capabilities. We will modify purchasing procedures to achieve better efficiencies in the procurement of our IT systems, and we will pursue joint interoperability with our other Service partners as we construct our network enterprise.

3. In the end, all Army generating force networks will be managed by a single command (Network Enterprise Technology Command (NETCOM)) organizing Army information to make it globally accessible, useful and secure for Soldiers deployed anywhere in the world.

4. The establishment of the Army global network enterprise requires dramatic changes to our current processes and network operations. Our combat-seasoned force is the best in the world, and transforming our network enterprise is central to a land force capable of conducting full-spectrum operations in the 21st Century. Your support is essential for our success.

GEORGE W. CASEY, JR.
General, United States Army

"**Over the next three years, the Army will transform LandWarNet to a centralized, more secure, operationalized, and sustainable network capable of supporting an expeditionary Army in this era of persistent conflict.**" – **Chief of Staff, Army**

A Soldier's Story

Ideal End-State

Universal E-Mail Address

Universal File Storage

One Telephone Number

Standard Collaboration Tool Set

SOLDIERS • FAMILIES • ARMY CIVILIANS
ARMY STRONG.

Transformation Outcome

Operationalize **LandWarNet to enable global warfighting capability**

Dramatically improve *Network Defense* posture

Realize Economies and *Efficiencies* while improving *Effectiveness*

Enable Army *Interoperability and Collaboration* with mission partners

Fixed Regional Hub Node (FRHN)

- Provides Global Transport
- Intra-Theater Connectivity
- Up to 3 Div per Hub Node
- Connect to each other & DISN services in garrison

Area Processing Center (APC)

- Data & Applications
- Consolidated IT hardware
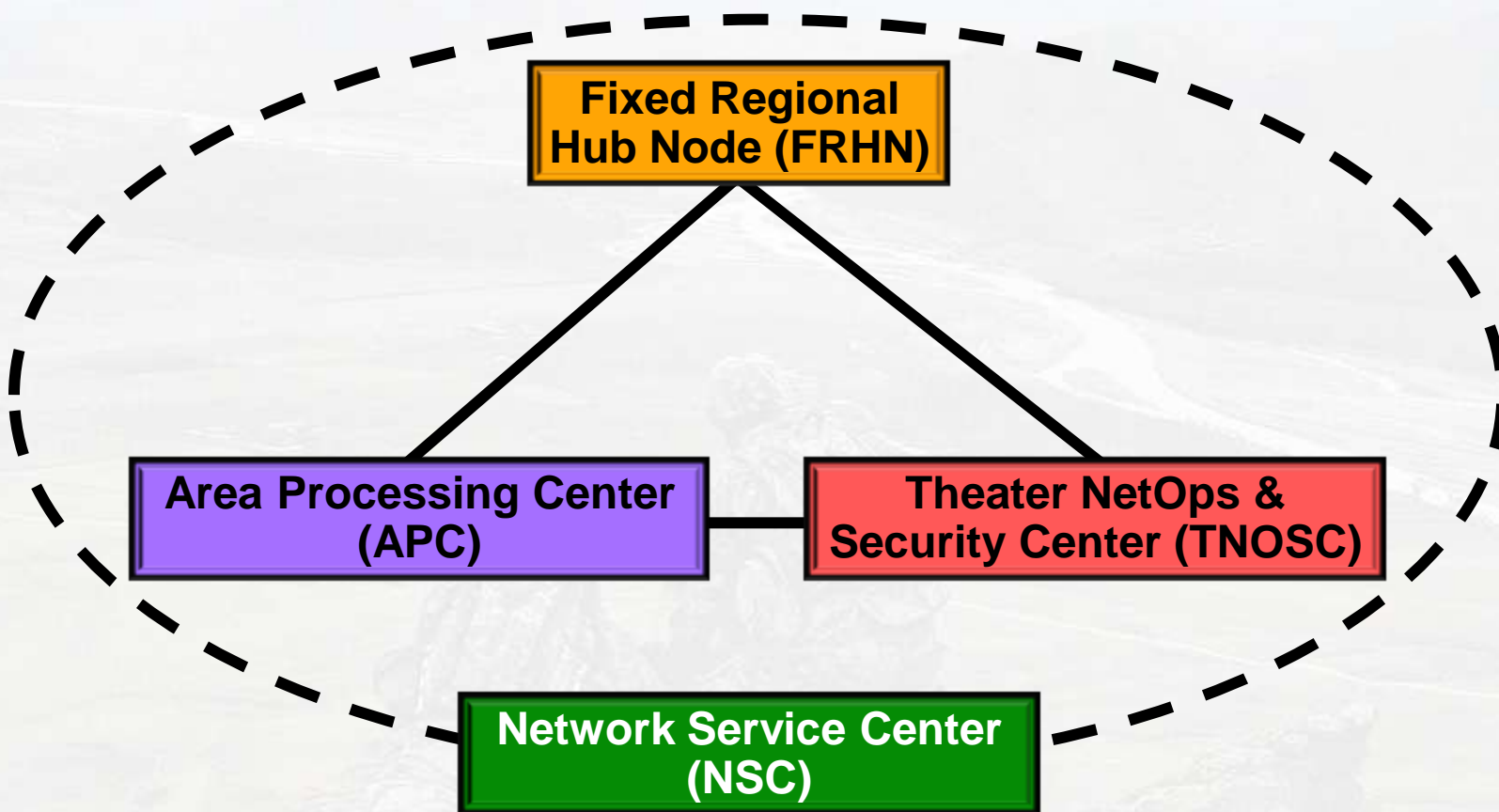- Projection & forward staging of info & services

Theater NetOps & Security Center (TNOSC)

- Technical oversight, enterprise, content, spectrum & Help Desk
- NetOps SA & optimize GIG avail
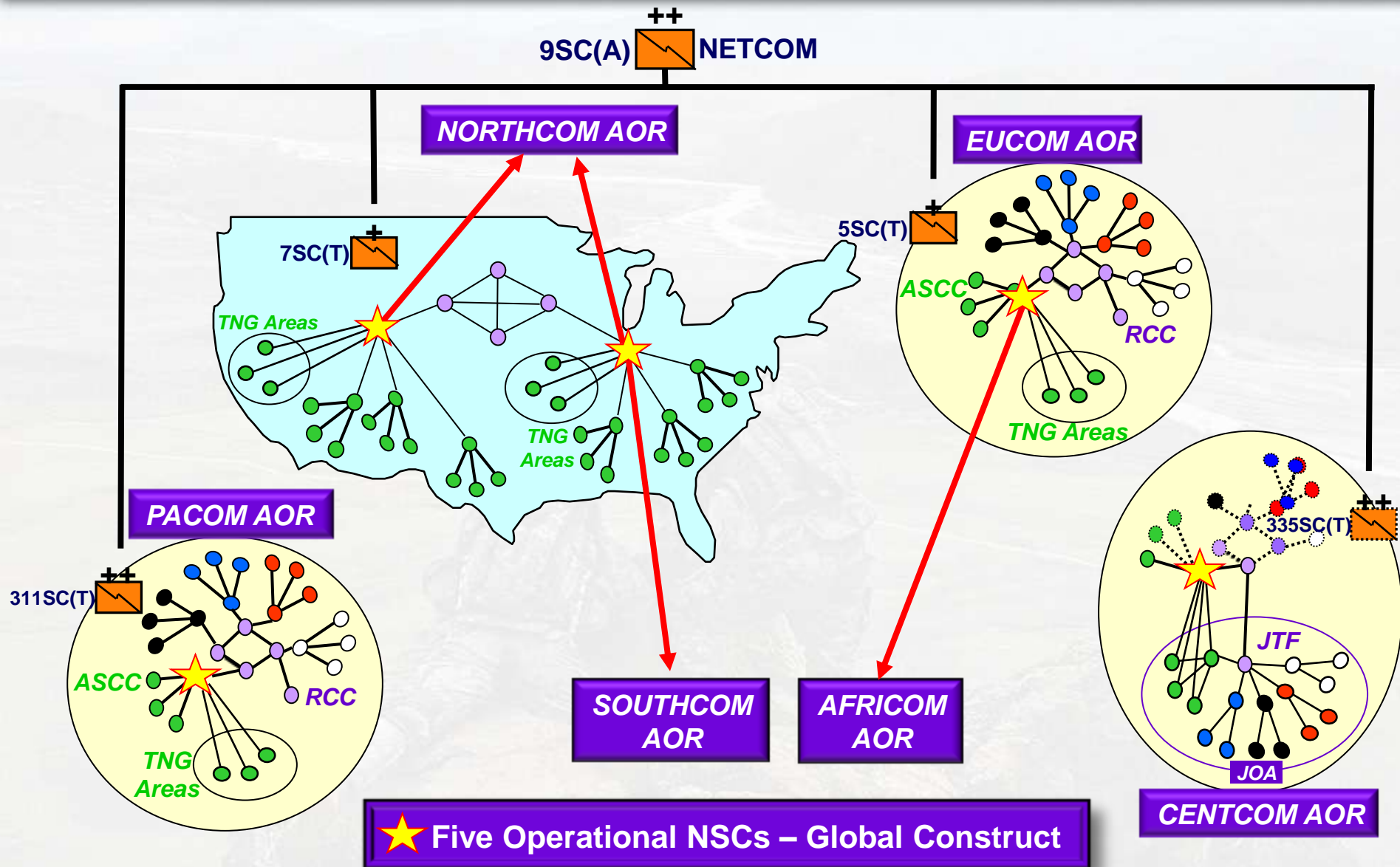- Information Assurance & Security
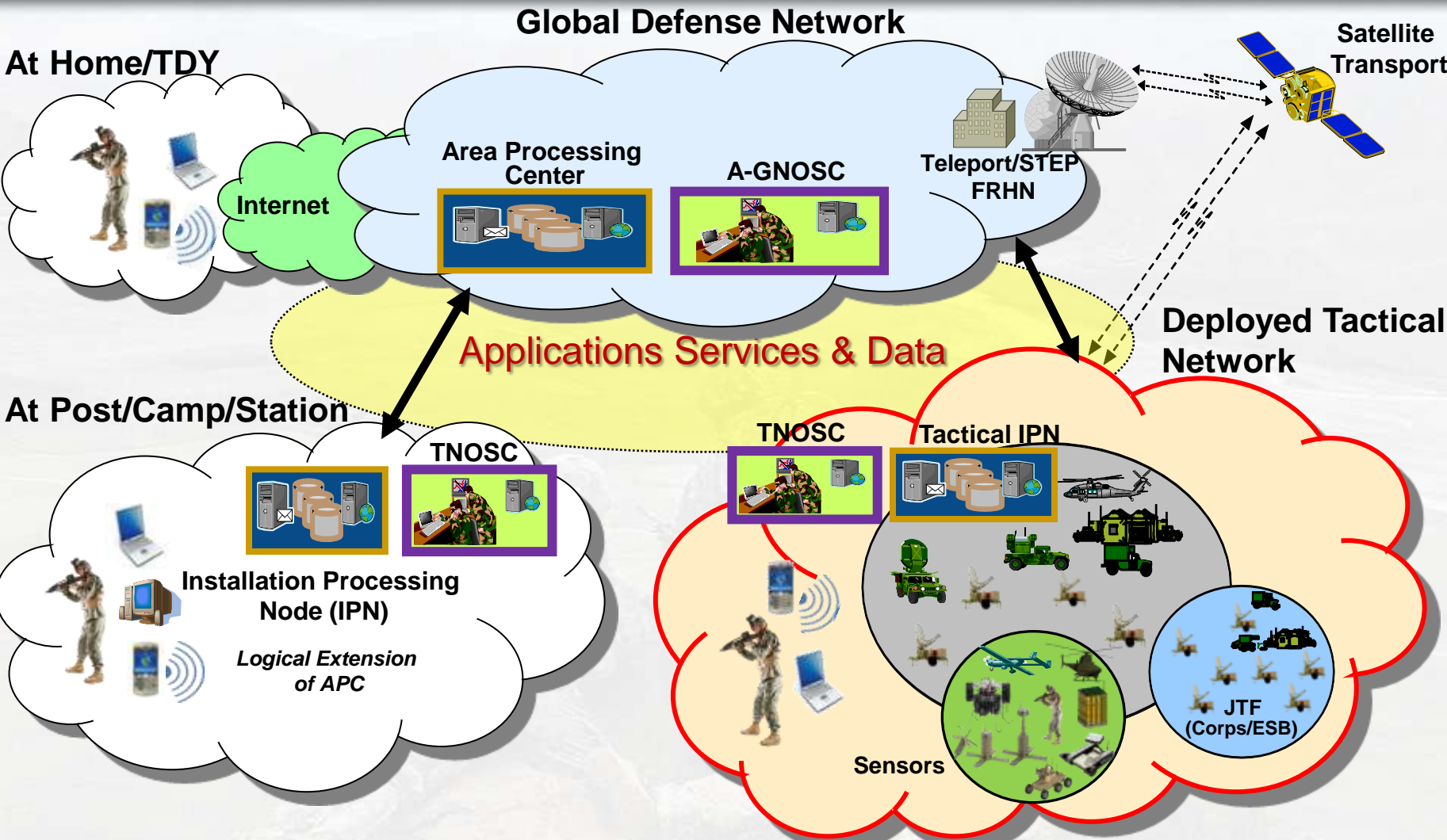
Network Service Center – Construct

Fixed Regional Hub Node (FRHN)

Area Processing Center (APC)

Theater NetOps & Security Center (TNOSC)

Network Service Center (NSC)

The "Always On" Network

9SC(A) ++ NETCOM

NORTHCOM AOR

EUCOM AOR

7SC(T) +

5SC(T) +

TNG Areas

ASCC

RCC

TNG Areas

PACOM AOR

311SC(T) ++

335SC(T) ++

ASCC

RCC

JTF

TNG Areas

JOA

CENTCOM AOR

SOUTHCOM AOR

AFRICOM AOR

⭐ **Five Operational NSCs – Global Construct**

Army Enterprise Network

Global Defense Network

At Home/TDY

Internet

Area Processing Center

A-GNOSC

Teleport/STEP FRHN

Satellite Transport

Applications Services & Data

Deployed Tactical Network

At Post/Camp/Station

TNOSC

TNOSC

Tactical IPN

Installation Processing Node (IPN)

Logical Extension of APC

JTF (Corps/ESB)

Sensors

Reset (Phases 0-1) ◄───► **Transition** ◄───► **Deploy (Phases 2-5)**

Always Accessible by the Soldier

Current

MTS
GPS
GPS
FBCB2

- Hardware Redundancy

- "Bolt-on" Electronics Systems

- Complex Cabling

- Large System Reset & Lifecycle Costs

Fires
Intel
Log
Air
Maneuver

- Software Redundancy

- "Work-around" Integration

- Complex Knowledge Management

- Large Training & Upgrade Costs
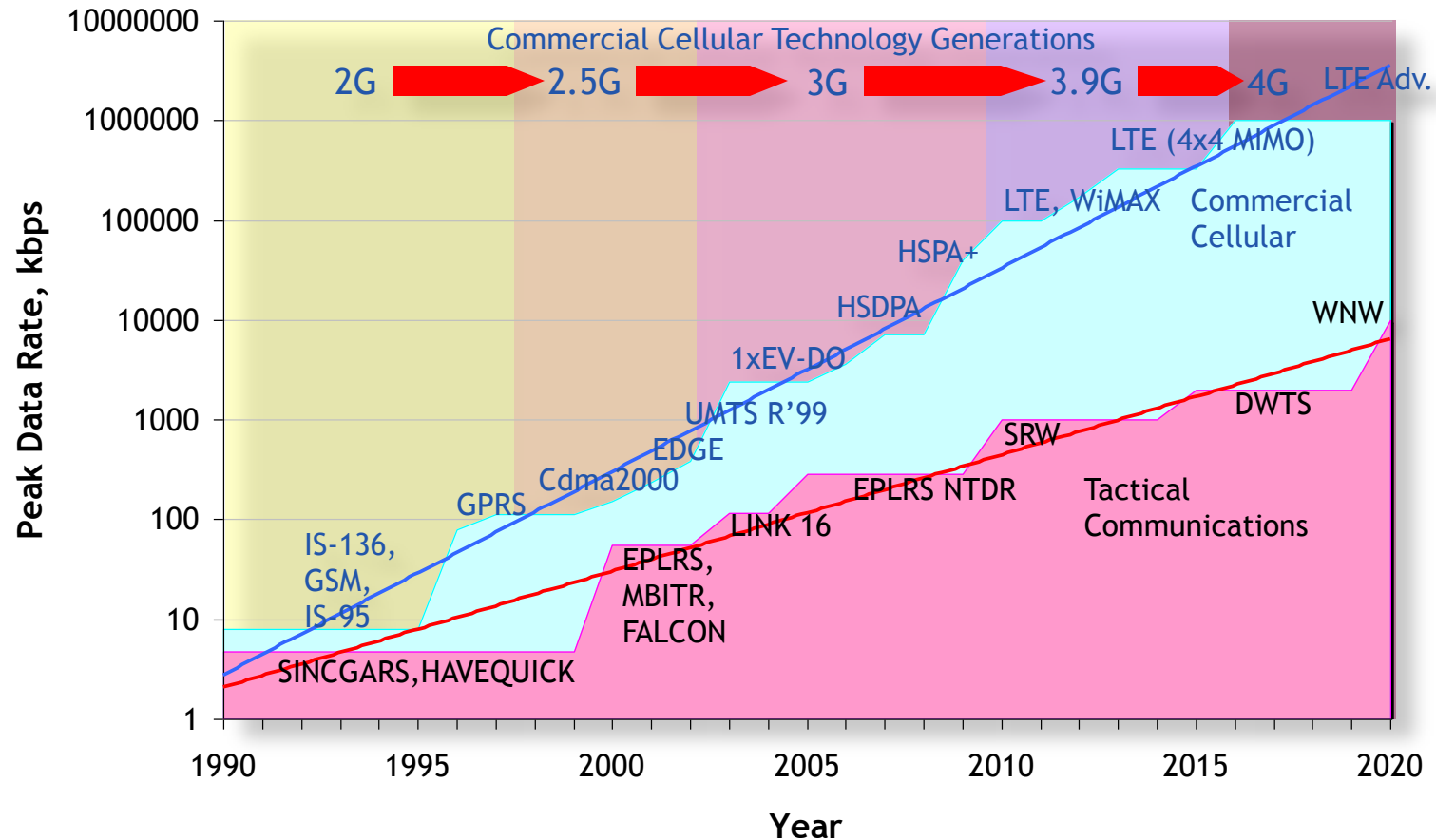
Current Battle Command Environment

Current

MTS
GPS
GPS
FBCB2

Fires
Intel
Log
Air
Maneuver

Future

HMMWV
MRAP/MRAP-ATV
Abrams
Stryker
Bradley
GCV

Platforms

Common Network Integration Kits (NIK)

Common Hardware with Integrated Apps

Commercial Cellular & Tactical Communications Data Rate Evolution

The Commercial Marketplace is Driving Innovation at an Accelerated Pace vs. the DoD market – DoD should Leverage this Innovation More Effectively

- UNITY OF EFFORT
- ⊙ "BIG 5" OF 21st Cent
- ⊙ WHAT TRYING TO ACCOMP w/
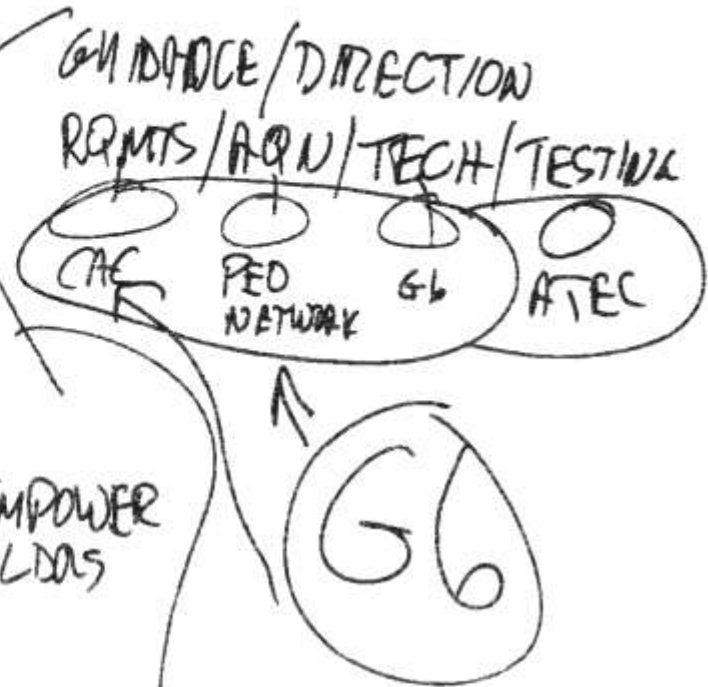 NETWORK? CONCEPT OF BC/EMPOWER
  LDRS
- LOWER EXPECTATIONS
- "TO CREATE CONTEXT"
- SIMULATIONS FOR TESTING / NETWORK + BC APPS

  - FLEXIBLE / ITERATIVE
  - BASELINE ASSESSMENT
  - CYBER

GUIDANCE / DIRECTION
RQMTS / AQN / TECH / TESTING

CAE   PEO   G6   ATEC
       NETWORK

G6

GNEC 'Big 4'

Enterprise E-Mail

➢ Enterprise E-Mail contract status:

– Draft RFI: 5 March 2010
– Industry Day: 24 March 2010
– Final RFP: 3rd QTR / FY10
– Contract Award: 4th QTR / FY10

➢ Spiral 1 Priority will be BRAC Users

– Focus on AMC, FORSCOM & TRANSCOM HQs
– Expand to Ft Riley, Ft Huachuca & Redstone Arsenal
– Potentially 251K Users

➢ Will evaluate performance and potential, then move to Spiral 2 for remainder of Army and then DoD

NSC/APC Strategy

➢ NSC/APC Spiral 1 contract status:
  - RFP Prep: 2nd-3rd QTR / FY10
  - Industry Day: 3rd QTR / FY10
  - SSEB: 3rd QTR / FY10
  - Contract Award: End 3rd QTR / FY10

➢ Outcomes of the NSC/APC strategy include:
  - Migration & Hosting Services for Applications & Data
  - Infrastructure as a Service
  - Containerized Services
  - Disaster Recovery & Business Continuity Services

NetOps '6+1' Toolset

- **Active Directory (AD)**
  - Single Forest within CONUS – 12 Feb 2010
  - Global AD Forest, July 2012

- **Remedy ITSM/Enterprise Service Desk (ESD)**
  - Tobyhanna Army Depot ESD IOC – 29 Jan 2010
  - Toll Free number – available within 90 days

- **Systems Center Configuration Manager (SCCM)**
  - NIPRNet CONUS Automated Reporting, TNOSC view NEC Status & Inventory
  - Federated Reporting Capability, SMS Legacy/CA – 31 Mar 2010
  - IT Asset Management (ITAM) Automated Aggregation OPORD – 31 Mar 2010

- **Host Based Security System (HBSS)**
  - ABCS Synchronization Test – 2 Feb 2010
  - Deployment Status, 15 Jan 2010

Allows Retirement of 31 Tools & Global Tool Standardization

Proving the Concept: OPVAL II

NSC OPVAL I

- Demonstrated – Early Collaboration, Single Identity & Fight Upon Arrival
- Validated processes & procedures
- Built key partnerships

NSC OPVAL II

- Single Global Identity
- Universal Collaboration
- Fight Upon Arrival
- Enhanced Security – Improved NetOps

The Warfighter __Will__:

- Have a Single Tactical Identity for communication and access to resources
- Retain the ability to collaborate with Higher, Adjacent and Subordinate Units across Theaters throughout all phases of operations
- Arrive in Austere Operational Area Ready to Fight Upon Arrival
- Conduct realistic Training using NSC Capabilities

> *Deploy a BCT-sized unit leveraging the range of global network enterprise capabilities through all phases of its deployment in FY11*
>
> *Deploy all BCT-sized units relying on the range of global network enterprise capabilities through all operational phases NLT FY12*
>
> – GEN George Casey
> Chief of Staff, Army

CSA Tasker – Unify the Network

Review and Transform C4/IT Requirements Process
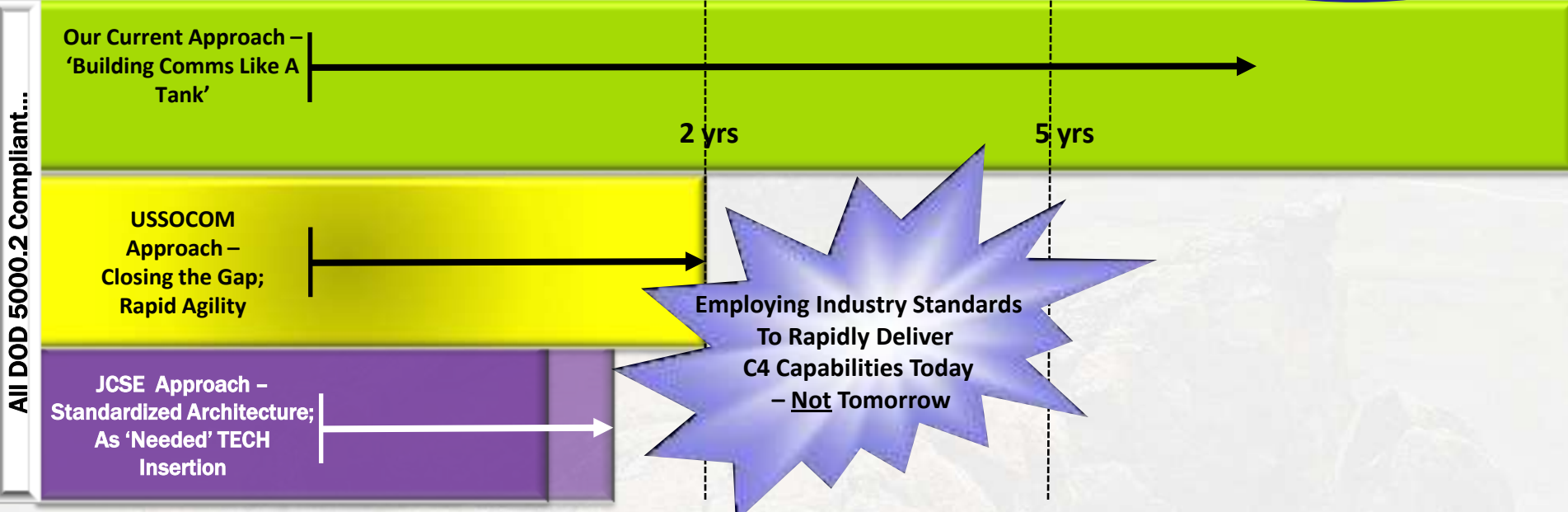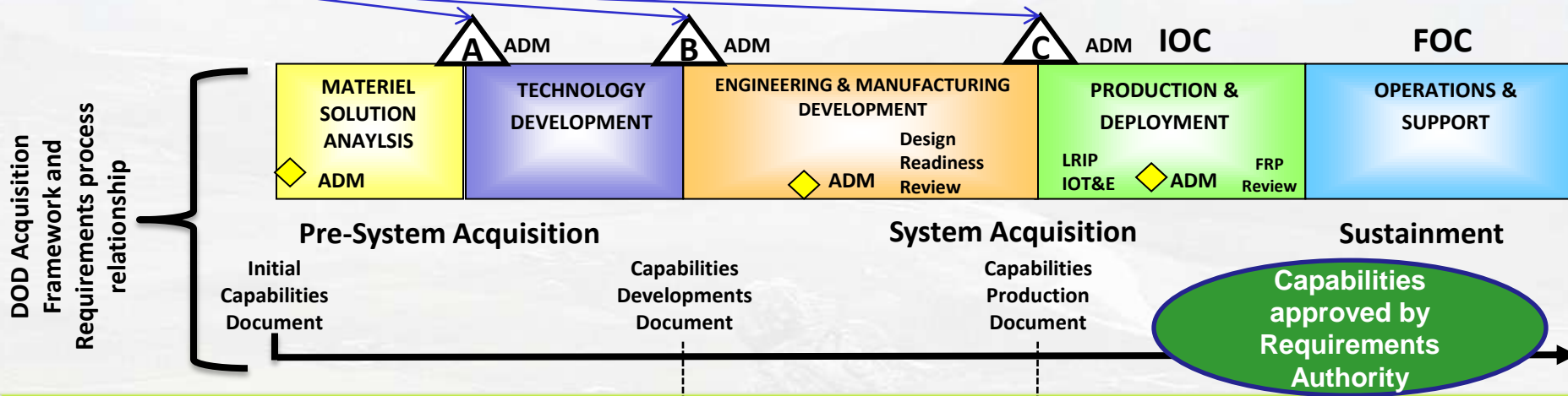
GNEC 'Big 4'

C4/IT GOSC

Evaluating Other Processes to Close the Capability 'Gap'
Leveraging Industry Standards…Remaining DOD 5000.2 Compliant
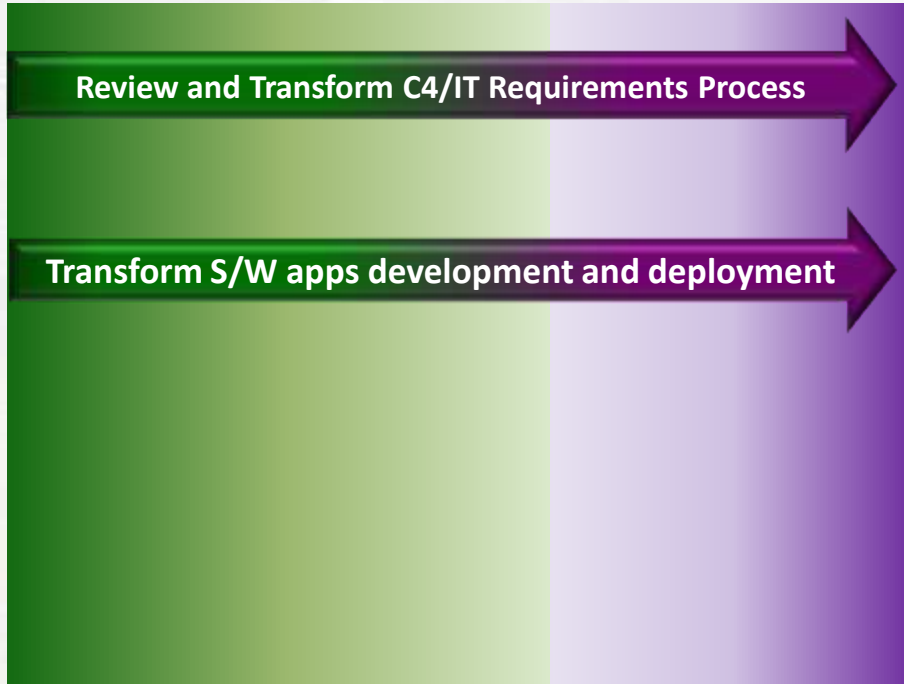
JCIDS: User needs & Technology Opportunities

A ADM   B ADM   C ADM   **IOC**   **FOC**

DOD Acquisition Framework and Requirements process relationship

MATERIEL SOLUTION ANAYLSIS	TECHNOLOGY DEVELOPMENT	ENGINEERING & MANUFACTURING DEVELOPMENT	PRODUCTION & DEPLOYMENT	OPERATIONS & SUPPORT

ADM

Design Readiness Review   ADM

LRIP IOT&E   ADM   FRP Review

Pre-System Acquisition   **System Acquisition**   **Sustainment**

Initial Capabilities Document

Capabilities Developments Document

Capabilities Production Document

Capabilities approved by Requirements Authority

All DOD 5000.2 Compliant…

Our Current Approach – 'Building Comms Like A Tank'

2 yrs   **5 yrs**

USSOCOM Approach – Closing the Gap; Rapid Agility

Employing Industry Standards To Rapidly Deliver C4 Capabilities Today – Not Tomorrow

JCSE Approach – Standardized Architecture; As 'Needed' TECH Insertion

CSA Tasker – Unify the Network

Review and Transform C4/IT Requirements Process →

Transform S/W apps development and deployment →
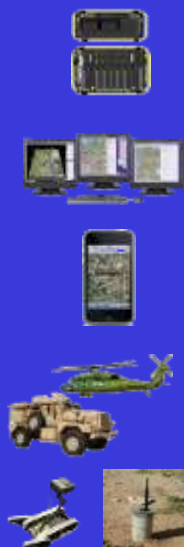
GNEC 'Big 4' →

C4/IT GOSC →

End User Environment & Process

End User Environment

Standardize

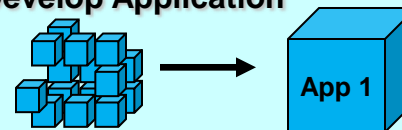|	LINUX	WIN
	✔	✔
		✔
	✔	
	✔	
	✔	

OS

Security

Development

. . . .

Process

Define Business Process

Select Environment

Develop Application

App 1

Submit to App Store

| Test |
| Certify |
| Available |
| Measure |
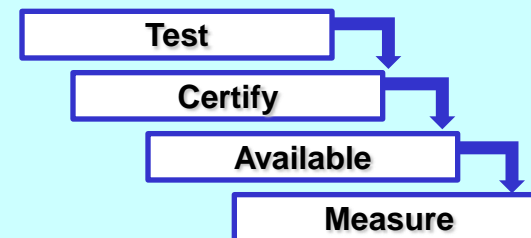
Pilots: PEO IEWS – C&A; PEO C3T – BC Web SDK; TRADOC & PEO EIS – Mobile Apps, JPM Guardian & ADCF-E2E Process; Apps 4 the Army (non-POR)

Software/Apps Development

- **Web Application Development Challenge**
- **Announced 1 March 2010**
- **Employee Cash Awards up to $30,000**
- **E-mail Questions to:**
  CIO/G6ArmyApps@conus.army.mil
- **Details, info & registration on AKO at:**
  http://www.army.mil/ciog6/armyapps

- **AUSA Torchbearer brochure available on AUSA site at:**
  http://www.ausa.org/publications/ilw/pages/default.aspx

CSA Tasker – Unify the Network

- Review and Transform C4/IT Requirements Process
- Transform S/W apps development and deployment
- Transform Network Certification – End to End Testing
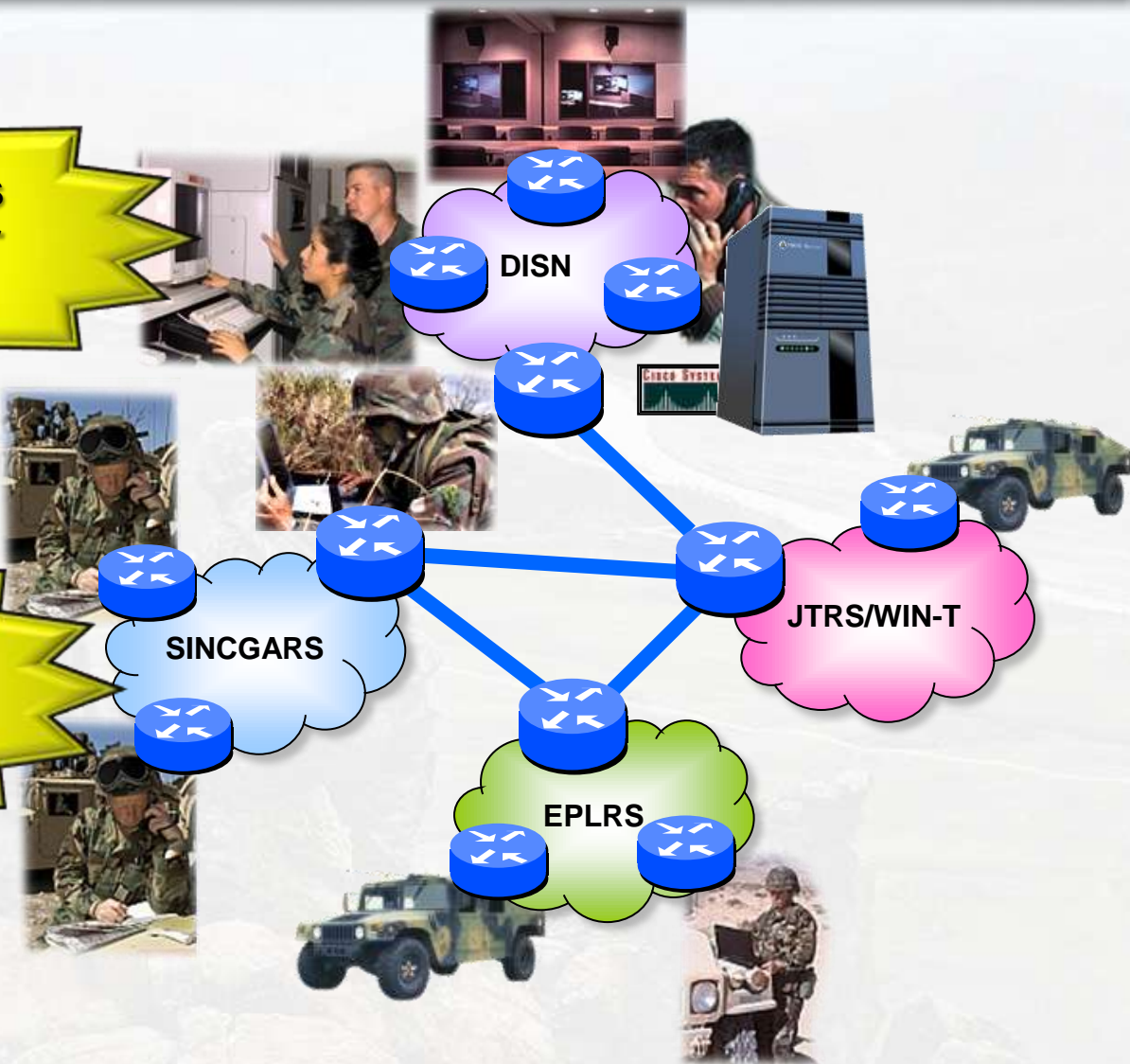
GNEC 'Big 4'

C4/IT GOSC
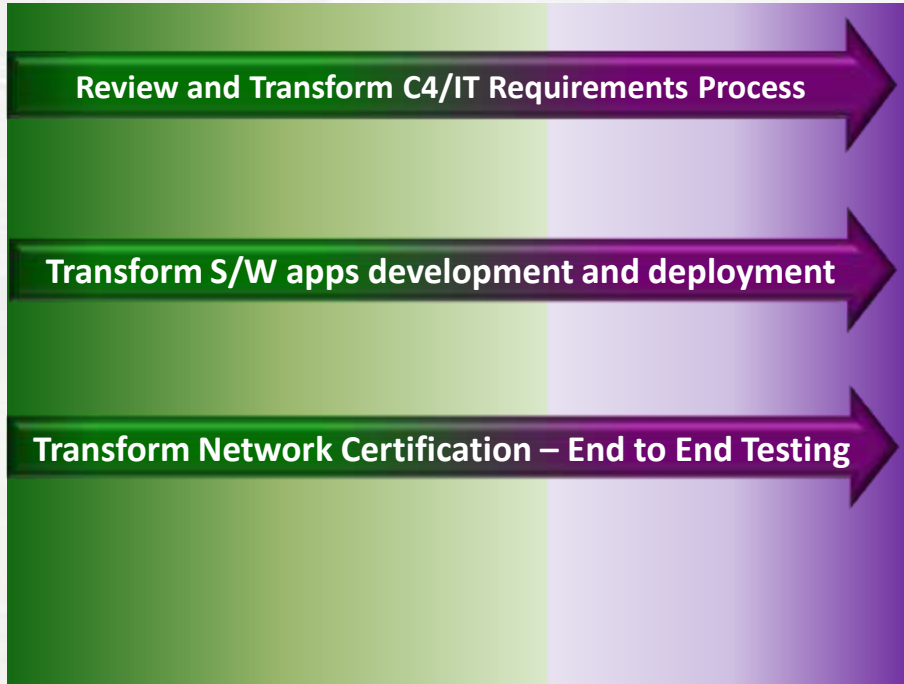
Our Approach
Why EoIP Networking?

IP switches/routers connect dissimilar networks

Common standards & interfaces ensure end-to-end interoperability

DISN

SINCGARS

JTRS/WIN-T

EPLRS

EoIP networking provides a seamless convergence layer for _all_ networks….
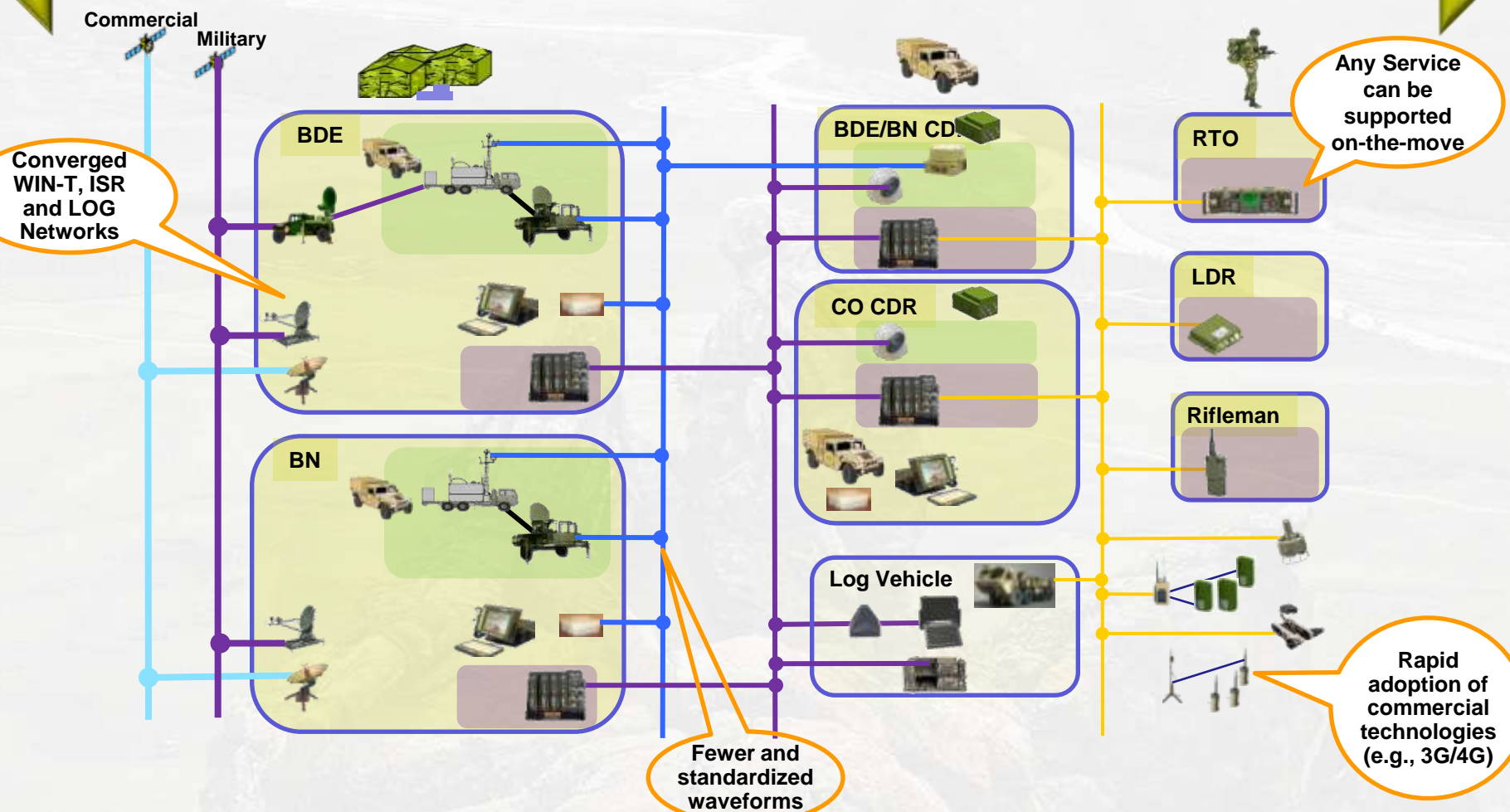**... and applications, sensors, Fire & Maneuver**

**All systems riding a common, interoperable EoIP Backbone
Establishing a 'plug and play' environment**

Commercial

Military

Converged WIN-T, ISR and LOG Networks

BDE

BN

BDE/BN CDR

CO CDR

Log Vehicle

RTO

Any Service can be supported on-the-move

LDR

Rifleman

Rapid adoption of commercial technologies (e.g., 3G/4G)

Fewer and standardized waveforms

VCSA Memo

Establish Governance Over The Deployment of the Network

CSA Tasker – Unify the Network

Review and Transform C4/IT Requirements Process

Transform S/W apps development and deployment

Transform Network Certification – End to End Testing

Review and Transform C4/IT Acquisition

GNEC 'Big 4'

C4/IT GOSC
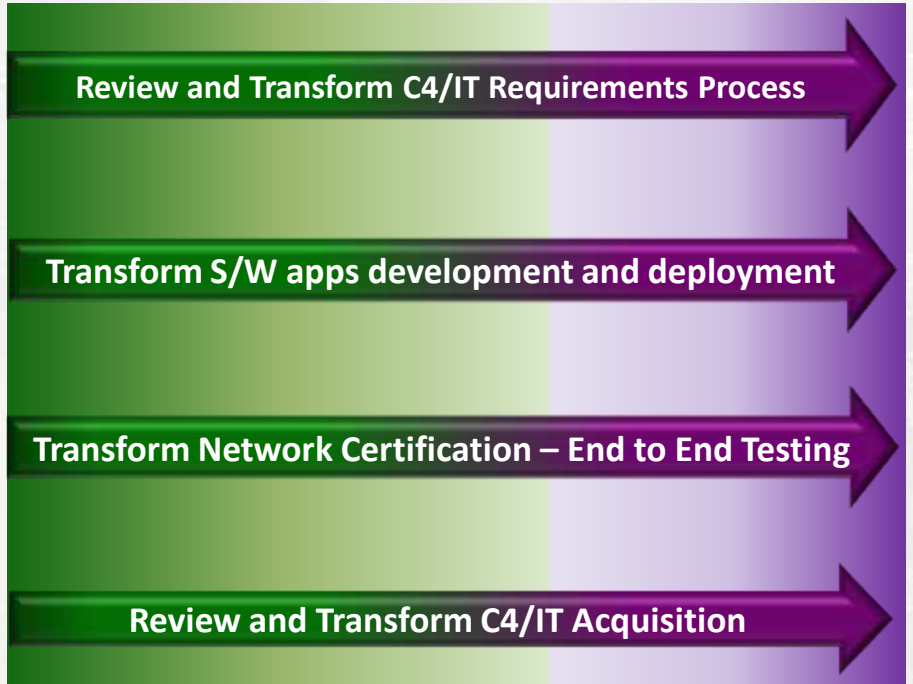
'End State' Architecture to Guide Investment

Our End State
Influence POM 12-17….

ESB

HHT   **ESC**   **OR**   **ESC**

CPs: 28
PAX: 120

CPs: 14
PAX: 60
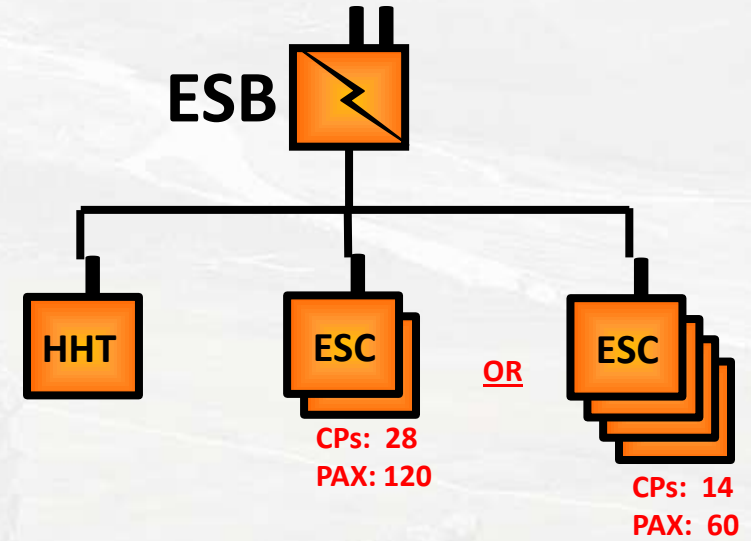
…and Re-Balance Signal Forces thru the FAA

FY10 – IT Budget

Segments	Sub-Segments	C4/IT Resources	Major Programs
Battle Command Co-lead: G3/5/7 LWN/BC TRADOC	Protection, Maneuver, Log/Sustain, C2, Fires, Intel	**PB10 LOCK $3,616M**	• **Army Battle Command Systems** • **Global Cmd & Control System-Army** • **Maneuver Control System** • **Global Positioning System** • **Blue Force Tracker** • **Forward Area Air Defense C2 System** • **Global Combat Services Spt-Army** • **Advance FA Tactical Data System**
Network Co-lead: CIO-G6 TRADOC	Net Services, Transport, NetOps	**PB10 LOCK $4,308M**	• **Warfighter Info Network – Tactical** • **Joint Tactical Radio System** • **Installation Information Improvement Modernization Program** • **Enterprise Satellite Terminals** • **Long Haul Communications** • **Information Assurance Programs** • **Army/Defense Knowledge Online**
Generating Force Enterprise Activities Lead – CIO/G6	Personnel, Finance, Acquisition, Training, Install & Environ, Force Mgmt, Health	**PB10 LOCK $1,746M**	• **Single Army Logistics Enterprise** • **General Fund Enterprise Business System** • **Defense Integrated Human Resources System** • **Army Recruiting Systems** • **Medical Communications for Combat Casualty Care**
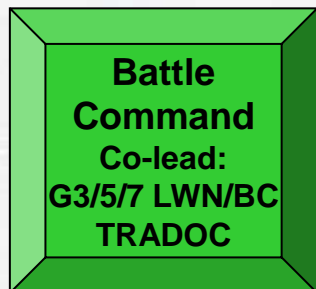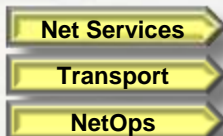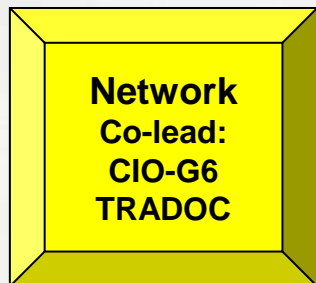
Conclusions

Global Network Enterprise Strategy
…transforming to an Expeditionary Army

Global Network Enterprise Construct
…Operationalize, Defend, Efficiencies & Effectiveness, Joint

Unity of Effort
…transforming Our Army & the Signal Regiment

Shared Situational Awareness
*…**Bottom Line** for the Joint Warfighter*

America's Army – The Strength of the Nation

Service-Disabled Vet-Owned Small Business (SDVOSB) Opportunities

> Veterans Benefits Act of 2003 & Executive Order 13360 sets goal of 3% for SDVOSB Contracts

> Over 12,000 SDVOSB firms registered in Central Contractor Registration (CCR) Database

> Center for Veterans Enterprise maintain VetBiz Vendor Info Pages (VIP) Database

> Army Small Business Website useful resource for SDVOSB http://www.sellingtoarmy.info/User/ShowPage.aspx?PageID=70

> Government Services Agencies Website useful resource as well http://www.gsa.gov/portal

QUESTIONS & THOUGHTS

LTG Jeff Sorenson
Chief Information Officer/G-6

AMERICA'S ARMY: THE STRENGTH OF THE NATION
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